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(S4) TWE: SCREENING METHODS FOR ENZYMES AND ENZYME KITS

(57) Abstract

Recombinant enzyme libraries and kits where a plurality of enzymes are each characterized by different physical and/or characterized characteristics and classified by common characteristics. The characteristics are determined by accomming of recombinant enzymes expressed by a DNA library produced from various microorganisms. Also disclosed is a process for identifying closes of a recombinant library which express a protein with a desired activity by acreeqing a library of expression clones tandomly produced from DNA of at least one sucroorganism, said acreeding being effected on expression products of said clones to thereby identify clones which express a protein with a desired activity. Also disclosed is a process of acreening clones having DNA from an uncultivated microorganism for a specified protein activity by screening for a specified protein activity in a library of clones prepared by (i) recovering DNA from a DNA population derived from at least one uncultivated microorganism; and (ii) transforming a host with recovered DNA to produce a library of clones which is acreened for the specified protein activity.